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> Magalie Roman Salas, Esq. Secretary Federal Communications Commission 1919 M Street, N.W., Washington, D.C. 20554

> > CC Docket No. 98-146 Re:

Dear Ms. Salas:

Transmitted herewith, on behalf of TDS Telecommunications Corporation (TDS Telecom or TDS), are an original and 4 copies of its comments on the Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146.

In the event of any questions concerning this matter, please communicate with this office.

Very Truly Yours,

Margot Smiley Humphrey

Margot Smiley Humphrey

Enclosure

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## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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Advanced Telecommunications Capability	•	
to All Americans in a Reasonable and	<b>)</b>	CC Docket No. 98-146
Timely Fashion, and Possible Steps to	)	
Accelerate Such Deployment Pursuant	)	
to Section 706 of the Telecommunications	)	
Act of 1996	)	

### COMMENTS OF TDS TELECOMMUNICATIONS CORPORATION

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#### **COMMENTS OF TDS TELECOMMUNICATIONS CORPORATION (TDS)**

TDS Telecommunications Corporation (TDS Telecom or TDS), on behalf of its 106 incumbent local exchange carriers (ILECs) in 28 states and by its attorneys, submits these comments to respond to the Notice of Inquiry (NOI). FCC 98-187, released August 7, 1998 in the above captioned proceeding. TDS Telecom recognizes the importance of enabling customers throughout the nation to reap the full benefits of the revolution in global and national information resources. Its LECs are preparing for the challenge of extending advanced capabilities to the

TDS Comments September 14, 1998 primarily rural and high cost areas to which they currently provide federally-defined universal services as Eligible Telecommunications Carriers (ETCs), designated pursuant to 47 U.S.C. §214(e).

#### I. SUMMARY

TDS Telecom and its 28 incumbent rural telephone companies endorse the national goal in \$706 of extending advanced switched, interactive, multipurpose broadband capability to all Americans. As high-speed bandwidth becomes the common currency of our national and global economy and society, the typically low density, high cost rural areas the TDS ILECs serve cannot afford to be left behind. But the immense cost of mandating nationwide deployment before the marketplace defines itself and its limits -- illustrated by the estimated \$668 million price tag for Wisconsin to require statewide conformity with a 28.8 mbps standard, another partial step toward advanced broadband capability -- not only counsels against regulating ahead of the market curve, but also indicates that realizing the national commitment in rural areas will necessitate resort to the federal universal service support machinery in §254 of the 1996 Act. After all, the high quality, evolving, though still largely voice-driven, public network deployed in rural areas so far has not occurred by marketplace forces alone, but with RUS financing and implicit and explicit support flows in the inter- and intrastate jurisdictions. Such reinforcement for ILECs' dedicated efforts to modernize their networks will be even more important as technology multiplies both what communications can provide and the dependency of all areas on fast and abundant flows of information -- but rural markets still must contend with sparse population, limited traffic volumes and high per-customer and per-minute costs. Section 254 is

ready to help; it calls for comparable rural access to advanced telecommunications and information services.

Letting the market lead the way to "reasonable and timely" modernization by responding to what services customers want from broadband capability, what technology works and is cost-effective and how growth in demand can reduce the total and unit costs of nationwide broadband deployment honors (a) the Act's commitment to reduced government interference, (b) §254's market-sensitive considerations for evolving the definition of universal services, (c) §706's own blueprint for a series of inquiries to monitor and actions to encourage broadband development and (d) the need to prevent high cost support from exceeding sustainable levels.

While regulatory intervention to jump start multiple broadband competitors in rural markets may be counterproductive, there are regulatory obstacles to rural broadband investment that the Commission should remedy: It should add broadband capability to the universal service definition at the appropriate time, but must first fix the anomaly that forecloses all support if an eligible carrier does not already provide even a newly-recognized evolutionary universal service. And it should find another way to justify Internet support for schools and institutions that does not manipulate the definition of Internet access to exclude it from the telecommunications services which can be added to universal service support to meet the general public needs in high cost areas.

II. TO ENCOURAGE REASONABLE AND TIMELY DEPLOYMENT OF ADVANCED TELECOMMUNICATIONS TO RURAL AMERICANS, THE COMMISSION WILL ULTIMATELY HAVE TO INVOKE THE FEDERAL UNIVERSAL SERVICE MECHANISMS MANDATED BY §254

Section 706 of the 1996 Act, though somewhat obscurely printed in the notes under 47 U.S.C. §157, first directs the Commission and the states to "encourage the deployment on a

reasonable and timely basis of advanced telecommunications capability to all Americans" using, "consistent with the public interest ... price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." The law then orders the Commission to conduct this proceeding to look into the availability of advanced infrastructure, defined as two-way, switched broadband capability for voice, data, graphics and video telecommunications. If such capability is not being deployed in a reasonable and timely fashion, the Commission must "take immediate action "to accelerate the process by removing barriers to infrastructure investment" and "promoting competition in the telecommunications market."

A. The National Commitment to Broadband Proliferation Throughout the Country Is a Highly Desirable Public Policy Goal

Nationwide access to the advanced broadband capability embraced by Congress is a worthwhile national goal that ultimately envisions redefining the fundamental nature of the public switched network to open the door of the information economy and society to everyone. TDS Telecom endorses that forward looking vision and plans to be a provider of continually-improving and evolving network capabilities and services to the communities its scattered ILECs serve. The TDS Telecom service areas, at present, consist mostly of low density markets with a more heavily residential customer base than the large urban ILECs and the virtually unregulated competing local service providers throughout the United States. Indeed, TDS Telecom believes Congress was aware that communities like these, as well as schools and classrooms, were not likely to experience "reasonable and timely" deployment of advanced network capabilities as marketplace forces stimulate deployment for urban areas and large business customers. Its

<sup>&</sup>lt;sup>1</sup> 47 U.S.C. §157

consequent desire to prevent information poor areas and customer groups and the desire to realize the education potential of new information delivery arrangements are the main reasons why Congress enacted §706 as a "necessary failsafe to ensure that the bill achieves its intended infrastructure objective ... to enable subscribers in all parts of the United States to send and receive information in all its forms ... over a high-speed switched, interactive, broadband, transmission capability."<sup>2</sup>

Congress was right to be concerned. There is little doubt that whenever advanced broadband capabilities become widely available, whichever areas and population segments do not gain access to the power and speed of broadband telecommunications will be left behind. However, Congress's vision of nationwide broadband availability will not come cheaply for the nation. And, advanced broadband capability will surely not be self-executing or self-supporting in many areas. The cost of fulfilling that vision today would be enormous. For example, when the Wisconsin Commission proposed to propel the state's public networks toward improved data capability, the state's ILECs were shocked to find that the proposed requirement would cost almost \$670 million. This estimated cost only included the cost to move to a network capable of 28.8 kbps from the previously-required level of 9600 bits per second. ILECs had no reason to believe that sufficient revenues from customer payments for services in their service areas would materialize to recover the costs of that expanded broadband initiative.

<sup>&</sup>lt;sup>2</sup> Senate Report 104-230, p. 51 (reporting on §304 of the Senate-passed bill, the model for §706).

<sup>&</sup>lt;sup>3</sup> Full advanced broadband capability would cost much more, since it would require additional upgrades such as fiber transport and XDSI

B. Today's Up-to Date Rural Network Has Required Significant Governmental Encouragement and Economic Support

Even today's public network has not been self-supporting from customer demand and revenues in most rural areas. Indeed, rural ILECs such as the TDS Telecom ILECs have been able to build and improve their rural networks, historically designed for the much less costly needs of providing high quality voice service, only because of the longstanding universal service commitments and mechanisms that regulators have employed to extend high quality service to places that marketplace forces would otherwise serve poorly or not at all. That dependence is not new. The rural ILEC industry came into existence in the first place because the large, urban LECs were not interested in the nation's lowest density and least profitable markets.

As demand for data transmissions has grown, these support mechanisms have enabled TDS Telecom to deploy digital switching capability and to begin to introduce optical fiber into the network wherever the price and service characteristics justify that technology. The Commission's high cost mechanisms, including the expense adjustment and universal service fund, DEM Weighting and Long Term Support (and their present interim post-1996-Act counterparts for rural ILECs), reinforced by various implicit support flows, have enabled the TDS Telecom ILECs to provide service to provide 100% digital switches to extend that capability to all of its customers.

The progressive upgrade to high speed data-capable lines is far from complete. Although a TDS Telecom CLEC affiliate has recently begun to offer ADSL service in the Madison, Wisconsin market, mass market availability and pricing are not even possible at this time. While technology and economics have not yet enabled carriers to provide widespread interactive broadband transmission, TDS ILECs have been providing business customers that need

broadband capability with dedicated broadband facilities in markets where technology, demand and cost characteristics permit service at prices the businesses are willing to pay.

Not withstanding the efforts of TDS Telecom and other ILECs to meet customers' evolving needs, these market facts add up to three central realities about today's rural service:

First, the present high quality technology and services that the TDS Telecom ILECs and many other rural ILECs now offer their customers have not been deployed on a stand-alone or market-driven economic basis or schedule. Put another way, today's up-to-date rural ILEC capabilities were not deployed based on recovering the costs from the revenues generated by each rural market on its own. A highly beneficial result of the support flows has been that deployment -- and customer access -- did not have to wait until marketplace-based self-supporting infrastructure upgrades became possible.

Second, to update wireline networks to make advanced broadband services anywhere nearly as broadly available as "universal" voice service has become will require <u>nationwide</u> redesigning and rebuilding of the existing ubiquitous wireline network at enormous cost.<sup>4</sup> The task is to transform the very widely available voice telephony infrastructure into an equally widely available multipurpose information network.

And, <u>third</u>, the relatively low density and smaller customer bases and traffic volumes in markets served by rural ILECs such as the TDS ILECs remain as an enormous economic obstacle to area-wide deployment of advanced broadband capabilities in those markets, using any technology or combination of technologies, now and for some time in the future.

<sup>&</sup>lt;sup>4</sup> Among the needed deployment would be adding substantial fiber in the loop, LAN/WAN technology and other upgrades.

As a result, as explained further in Part IV, TDS Telecom believes that achieving the broadband deployment goals of §706 for rural areas will ultimately require universal service support pursuant to §254 of the 1996 Act. However, right now the state of broadband technology and the infancy of the two-way, high speed information transmission market both provide compelling reasons to refrain from any premature regulatory <u>fiat</u> for broadband deployment and from increasing government intervention to distort market forces at this time.

- III. REGULATORY INTERVENTION AT THE CURRENT EARLY STAGE IN THE DEVELOPMENT OF THE TECHNOLOGY AND THE MARKETPLACE FOR ADVANCED BROADBAND CAPABILITY WOULD BE PREMATURE AND NEEDLESSLY COSTLY
  - A. Regulators Should Not Choose a Broadband Technology

Section 706 avoids giving preference to any broadband technology, carefully defining advanced capability "without regard to any transmission media or technology." This circumspection is appropriate because the high speed broadband telecommunications marketplace is still at an early stage. For now, the trends established by actual customer demand and use of information remain the best guide towards the most efficient technologies, development schedule and target markets to establish and proliferate advanced broadband capability. Two of the principal reasons economists give for relying on marketplace forces are the ability (1) to drive innovation and (2) to use society's resources efficiently. Two-way broadband telecommunications demand and development have just begun to gain momentum.

Use of the Internet is growing at a phenomenal pace, but the extent to which mass market demand for faster access will emerge is unknown. The marketplace so far has led to wireline technology that can increase the bandwidth available over copper pairs in the "last mile" of the loop and make maximum use of existing facilities. However, claims are being made about the

relative merit of wireless or other technologies to provide advanced high speed bandwidth costeffectively.

The Commission should let these market-driven explorations and rivalries continue. It is premature to favor any technical solution or combination of broadband technologies either through direct government endorsement or indirect regulatory preferences conferred by imposing fewer regulatory burdens or affording greater access for some providers to inputs such as frequency allocations or preferential access to competitors' facilities and services.

B. For Now, the Direction of Broadband Telecommunications Development Should Be Shaped by Whatever Services Customers Need and Want

Prescriptive or preferential government actions, designed to force advanced broadband deployment irrespective of what customers want, should not be allowed to overpower the market signals. Valuable signals are likely to be evident first in parts of the marketplace where demand and competition are already beginning to drive broadband deployment. That market-driven deployment is aimed at providing particular services, such as higher speed access to the Internet. The current costs are still too high for a government policy that "if you build it [broadband capability], they will come." It would be wasteful, for example, for the Commission to intervene to accelerate the availability of greater bandwidth in the last mile of the loop in a market where customers want access to the Internet, but cannot use the improved loop efficiently as a practical matter because they lack a local provider and must pay for expensive long distance access to an Internet access provider someplace else. For this reason, the NOI (¶83) wisely plans to explore the International Telecomputing Association's suggestion to expand local Internet access. Also for this reason, TDS Telecom ILECs have been pursuing a company-wide goal of providing local Internet access in the communities they serve. Yet, even that seemingly modest goal may still be

ahead of what a particular rural market's economics can sustain at this point. Similarly, it would be futile to accelerate broadband loop deployment in a market where customers lack access to affordable CPE that is essential to connect to the prescribed advanced capability.

C. The Statutory Commitment to Encouraging Nationwide Deployment of Advanced Broadband Capability Should Not Get Ahead of the Market Curve

Section 706 contemplates encouraging deployment of advanced capabilities, where possible, by fostering competition and reducing regulation "to remove barriers to infrastructure investment." Thus, the statute's own logic indicates that before it turns to more intrusive "regulating methods" to accelerate deployment, the Commission must give the market a chance to work "on a reasonable and timely basis" wherever it can do so on its own. Congress plainly did not expect, much less require, nationwide advanced broadband capability to develop overnight. Nor did Congress intend Commission action compelling nationwide deployment as the result of this first inquiry, even if the inquiry finds that broadband development will be sluggish for some markets or customer segments. To the contrary, §706 mandates continuing inquiries to monitor deployment, starting with this first look within 30 months of enactment, but following up "regularly thereafter" The Senate Report on the provision upon which §706 is modeled also contemplates an ongoing process involving inquiries "at least every few years." The Senate Committee anticipated that inquiries would investigate the availability of "equipment needed to deliver advanced broadband capability." Thus, an early §706 inquiry could demonstrate the need to spur the equipment market. Until cost-effective technology was then developed and equipment was actually manufactured and became widely available, the Commission would not need to press ILECs for nationwide proliferation of broadband capability. Thus, Congress designed a reiterative process to monitor and prod broadband development towards a longer range goal of natiowide deployment

- D. Giving the Marketplace a Chance to Drive Broadband Development At First Will Comport with the Deregulatory Thrust of the 1996 Act and Minimize the Need for Regulatory Intervention and Support
  - 1. Initial Marketplace Reliance Is Consistent with the Act's Policy of Reducing Government Intervention

The gradual monitoring and encouragement process Congress designed makes economic and political sense. One of the main thrusts of the legislation was to foster deregulation, as competition will take the place of regulatory intervention. Letting the market work on advanced broadband deployment at first will both disclose what customers are willing to pay for advanced broadband capability in the markets which can generate revenues to support it and provide information about what the first, limited-scale deployment of the capability will actually cost. As technology develops, equipment is deployed and demand increases, the increasing size and penetration of the broadband market will help to bring the costs of deployment down. A "critical mass" of customers also reduces the cost per customer, which also helps make advanced broadband capability or service affordable for more customers. As the market process unfolds, growth and public acceptance should lead to more growth and more demand and still-lower unit costs. Moreover, to the extent that the development of advanced broadband capability is driven by the marketplace, the resulting competition (where it is economically feasible) will be robust, and prices and investments will rest on costs and potential revenues

Moreover, by postponing regulatory intervention until the likely limits of market-driven deployment are more reliably known, the limited support that will almost certainly be needed to finish the \$706 broadband deployment job in high cost rural markets will be more readily

sustainable. As noted earlier, TDS Telecom is convinced that, absent an unpredicted technological breakthrough that will overcome the economics of rural markets, the goal of \$706 cannot be completely satisfied without resort to universal service support. However, the cost of that support will be vastly higher if the Commission prescribes nationwide advanced broadband deployment before the market can prove in the technology and revenue-generating services where early deployment is economically feasible. Perhaps the most important role for the Commission in implementing \$706, therefore, will be to decide when the point is reached where the pace of market-driven broadband installations and the expansion of broadband availability will no longer be "reasonable and timely," and it is appropriate to turn to \$254.

There is a real danger that trying to make advanced broadband capability available nationwide far ahead of the market curve will undermine Congress's vision of nationwide access to information resources. The more speedily and prematurely the Commission takes heavy handed "action" to achieve the Act's longer term infrastructure vision by regulatory force, the more likely its efforts are to run aground on public resistance to sharing in the huge cost of government-dictated, over-hasty nationwide infrastructure modernization to achieve pervasive high speed bandwidth availability. In addition, if the Commission lets the market develop on its own to the right point, where market-supported infrastructure will indicate its own limits, it will avoid forcing all consumers to shoulder the cost for capabilities that only a few may want, need or be able to use. Beyond that, trying to accelerate advanced broadband capabilities ahead of the market curve now would have the unfortunate consequence of multiplying the support burden caused by the ambitious universal service program the Commission designed for schools, libraries and rural health care providers. That support fund has already drawn substantial

opposition from contributing carriers and members of Congress. Adding the cost of immediate force-fed broadband deployment could jeopardize that program and the sustainability of high cost support for the currently defined universal services and the §706 goals.

2. The Act's Universal Service Program Also Heeds Marketplace Signals Giving marketplace forces a meaningful opportunity to drive advanced broadband development is also in harmony with the universal service program in §254. That provision employs a federal-state joint board to define "the services that are supported by Federal universal service support mechanisms" (§254(a)(1), calls for periodic joint board re-examination to "evolv[e]" the definition "taking into account advances in telecommunications and information technologies and service," and sets up standards for that evolution. The standards for adding to the definition of universal services include the same kind of deferral to market developments in the first instance that we advocate for §706. Specifically, §254(c)(1) directs the joint board to consider four factors, including the extent to which the services in question "have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers" and "are being deployed in public telecommunications networks by telecommunications carriers." It is equally reasonable to look at the performance of the broadband market in attracting customers and to wait for evidence that advanced broadband capability is making significant headway with urban and business customers before turning to governmental intervention to mandate further deployment beyond what the market is likely to bring about. Indeed, waiting while marketplace forces and economies reduce the costs of accomplishing widespread availability for advanced broadband capability and other network

advancements will also help prevent the Act's "evolving" universal service definition from

becoming too costly for regulators and lawmakers to defend. In each case, giving the marketplace time to reduce costs will moderate the total tab for universal advanced broadband service to a level that is economically and politically sustainable.

### IV. THE COMMISSION WILL NEED ITS §254 UNIVERSAL SERVICE AUTHORITY TO SATISFY §706 WHERE THE MARKETPLACE ALONE WILL NOT

As explained above, the high per-customer cost of extending advanced broadband capability throughout rural markets will preclude full realization of the nationwide advanced broadband capability envisioned by §706 by the operation of market forces alone. Section 706 looks first to encouraging marketplace development by removing obstacles and promoting competition. Even when broadband capability can make inroads in denser markets, as sufficient demand emerges to support investment for broadband deployment out of the revenues from charging compensatory prices, that level of economic feasibility is unlikely to extend to the kind of areas most TDS ILECs serve. The simple reason the marketplace will not automatically serve these rural outposts is that carriers cannot be reasonably confident that they will be able to recoup the cost of investment in widely-available advanced broadband capability for thin rural markets because of the high per-customer prices they would have to charge. The Commission recognizes this in asking (¶12) "how we can give the private sector the confidence to invest in new high-bandwidth technologies and deploy them throughout this country."

The added competition and regulatory measures contemplated by §706 will not extend advanced capabilities to the most rural areas for the same reasons that led Congress to adopt various rural exceptions from the pro-competitive provisions of the 1996 Act.<sup>5</sup> Indeed, these

<sup>&</sup>lt;sup>5</sup> 47 U.S.C. §§214(e)(stricter standard for additional rural ETCs), 251(f) (rural exemption from harshest ILEC interconnection mandates), 253(f) (more state leeway to restrict rural competitors).

provisions indicate Congress's lingering uncertainty about the effects of exposing rural local exchange carriers to competition from carriers free to cream skim their few low cost, high volume customers. The NOI expresses similar economic uncertainty: It asks at one place (¶57) whether providing advanced telecommunications capability with respect to advanced broadband capabilities is "a natural monopoly or oligolopoly" a race that "only one runner or a few runners can win." Elsewhere, the NOI expresses interest in encouraging competition for the "last miles to homes and businesses." Professor John Panzar has warned that by pushing a policy of multiple broadband competitors for the last mile, regulators may deprive the area of its first advanced multipurpose broadband capability. 6 For a rural ILEC making the decision about whether to invest in broadband capability for its entire rural area, the question must not end with whether that market can generate sufficient revenues to support the costs, which will likely preclude any mass market availability. Under §§254 and 706 the question should be how the costs can be spread nationwide once the capability is recognized as part of the necessary package of telecommunications capabilities necessary for full participation in the nation's economic, educational, social and political life. The present recognition that the costs will far exceed the rural market's self-support capabilities and the doubt about whether the national commitment to broadband development will be implemented with programs that will make it a practical reality currently sap rural ILECs' broadband investment incentives. Once again, unless technological innovations or the market unexpectedly demonstrate otherwise, the Commission will need to use its authority under §254 to provide universal service support if the vision in §706 is to become a rural reality.

<sup>&</sup>lt;sup>6</sup> John C. Panzar, <u>Information Age Communications Networks for Rural America</u> (1988).

A. Broadband Capability Is Not Yet in the Federal Universal Service Definition
Beyond the economic doubts, it is significant that the Commission's rules under §254 do
not even allow high cost support to make ILEC broadband capability available to the general
public at present. Broadband capability in high cost areas is not part of the definition of
universal service adopted by the first joint board to implement §254(b); and no further "periodic"
review of the definition has yet taken place. Without that support vehicle, the unprofitability of
thin markets will deprive rural carriers of incentives to invest in advanced infrastructure. The
Act does not offer any other funding alternative to ensure that broadband infrastructure reaches

To expand the definition of universal service eligible for federal support under §254(c) to include the §706 capabilities, the joint board would first need to consider the market indicators discussed above, as §254(c)(1) requires. Even adding broadband capability to the §254 definition does not wholly clear the way to carrying out the purpose of §706. To use §254 as one of the "other regulating methods that remove barriers to infrastructure investment" contemplated by §706(a), there are two additional Commission-created regulatory barriers that must be rectified.

B. The Rules Now Preclude Support During Deployment of "Evolving" Universal Services

First, the Commission's rules currently require that a carrier must provide all the services within the federal universal service definition as a precondition for receiving universal service support. Unfortunately, this requirement means that, once broadband capability is added to the definition under §254(c), a rural carrier will not be not eligible for <u>any</u> federal universal service support, unless it is <u>already providing</u> the broadband capability §706 seeks to make available.

rural customers.

The Commission should change (or at least adopt a blanket waiver of ) this counter-productive rule to foster the "evolving" universal services contemplated by §254(c). The rule should permit support for a rural carrier designated as an ETC or seeking ETC designation to deploy the capabilities necessary to provide new universal service components just added to the list under §254(c). This would provide support for and ILEC while it upgrades its voice-based network to provide two-way broadband capability, once that capability becomes part of supported universal service.

C. The Commission Must Recover Its Authority to Support Advanced Internet Access

Second, the Commission must correct an unintended side-effect of its well-meant effort to legitimize Internet access support for schools, libraries and rural health care providers. The problem is that the Commission defined "Internet access" — including the separable telecommunications transmission functions involved in providing access to the information capabilities available on the Internet — as a non-telecommunications service. It used this semantic tactic to stretch subsection (h)(2) to authorize institutional support for Internet access. Unfortunately, this strategem disqualifies Internet access provided by telecommunications carriers to high cost rural markets from universal service support under §254(c) and (e): That basic high cost support for universal services is available only for telecommunications services, since the definition of universal services is limited to that category of carrier activities. Excluding support for access by the general public to capabilities that become part of the necessary telecommunications package is contrary to the intent of the Act to ensure "sufficient" federal support, since one of the express mandates of the universal service provision is for reasonably comparable access for "fc]onsumers … in high cost areas" to "advanced

telecommunications and information services that are reasonably comparable to those services provided in urban areas ...."

The Commission should either find another way to justify its Internet access policy for schools and other §254(h) public institutions or seek separate authority from Congress to support Internet access by those §254(h) institutions. Such corrective action will enable the Commission to provide the universal service support for Internet access using advanced broadband capabilities that §706 makes necessary and that Congress plainly intended to include in the high cost support available under §254.

#### V. CONCLUSION

Section 706 holds out the hope that all U.S. localities and customers will have access at some point to advanced broadband capabilities that extend throughout the nation's public switched network. TDS Telecom genuinely wants to continue to play its role as provider of high quality, modern telecommunications services to its primarily rural local exchange customers in typically high cost, low density areas in 28 states. Our experience with building rural infrastructure convinces us that extending broadband capability to the last mile for the highest cost rural customers will require a federal universal service support mechanism under \$254. However, TDS Telecom also believes that \$706 does not intend premature government interference in the development of broadband infrastructure. Interfering with the marketplace too early will inflate the total nationwide costs, the customer prices and the necessary high cost support for the added capability, beyond what the competitive market can sustain or customers will pay.

Consequently, TDS Telecom urges the Commission to let the marketplace decide on the technologies and characteristics of broadband capability and demonstrate what infrastructure can be self-sustaining in the majority of the nation. At that point, the Commission should step in to fine tune and apply the federal universal service mechanism authorized by §254. That prudent course will ensure that rural residents and businesses gain comparable access to reasonably priced advanced network capabilities and the services they support, as Congress intended in enacting both §706 and §254 of the 1996 Act, at the lowest feasible cost to the U.S. telecommunications users.

Respectfully submitted,

TDS Telecommunications. Corporation

By: <u>/s/ Margot Smiley Humphrey</u>
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September 14, 1998

#### CERTIFICATE OF SERVICE

I, Victoria C. Kim, of Koteen & Naftalin, hereby certify that true copies of the foregoing Comments of TDS Telecommunications Corporation on the Inquiry Concerning the Deployment of Advanced Telecommunications, CC Docket No. 98-146. have been served on the parties listed below, via first class mail, postage prepaid on the 14th day of September, 1998.

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